

Conservation for Agriculture's Future



Contour Farming

Farming with row patterns nearly level around the hill – not up and down hill.

How it works

Crop row ridges built by tilling and / or planting on the contour create hundreds of small dams. These ridges or dams slow water flow and increase infiltration which reduces water erosion. Cross slope farming also reduces sheet and rill erosion from water, but to a lesser degree than true contouring.

How it helps

- Contouring can reduce soil erosion by as much as 50% from up and down hill farming.
- By reducing sediment and runoff, and increasing water infiltration, contouring promotes better water quality.

Planning ahead

- Will more than one key contour line be needed because of steep or irregular slopes?
- Are terraces or stripcropping needed for steeper slopes?
- Are field borders needed to replace end rows in the contouring system to control sheet and rill erosion?

Tech notes

- Establish a key line around the hill by using a hand level or contour gauge
- Contour key line grade should not exceed 2% except within 100 feet of an outlet (ie waterway). In that case, the grade can be a 3% slope.
- Perform all tillage and planting operations parallel to the key contour line
- Contouring is less effective in preventing soil erosion on steeper or longer slopes
- Where curves in contour lines are too sharp to farm, grass strips may be needed for turning
- Replace end rows with field borders to reduce erosion. Field borders should be wide enough to accommodate turning farm equipment without additional end rows.
- Some topography may be too steep and/or irregular to contour.
- Contour farming is often used in combination with other practices such as terraces, sediment basins or strip cropping.

Maintenance

- Use grassed waterways in areas where runoff is concentrated to prevent gully erosion. Always lift equipment and turn off spraying equipment when crossing waterways.
- Contoured rows should enter the grassed area of waterways on the level, but should direct water into the grass.
- To avoid having to lay out new key contour lines every year, establish a narrow permanent strip of grass along each key contour line.